

Title (en)

ULTRASOUND DIAGNOSTIC APPARATUS AND OPERATION METHOD OF ULTRASOUND DIAGNOSTIC APPARATUS

Title (de)

ULTRASCHALLDIAGNOSEVORRICHTUNG UND BETRIEBSVERFAHREN FÜR DIE ULTRASCHALLDIAGNOSEVORRICHTUNG

Title (fr)

APPAREIL DE DIAGNOSTIC À ULTRASONS ET PROCÉDÉ DE FONCTIONNEMENT D'UN APPAREIL DE DIAGNOSTIC À ULTRASONS

Publication

**EP 4295962 A3 20240228 (EN)**

Application

**EP 23208517 A 20190513**

Priority

- JP 2018124377 A 20180629
- EP 19174178 A 20190513

Abstract (en)

A control circuit of an ultrasound diagnostic apparatus having an ultrasound endoscope controls a transmission circuit to generate a transmission signal, which includes a diagnostic driving pulse applied to each of a plurality of ultrasound transducers that generate ultrasound waves for acquiring an ultrasound image, in the case of acquiring the ultrasound image, and controls the transmission circuit to generate a polarization driving pulse, which has a polarization driving voltage different from voltage of the diagnostic driving pulse within the same settable voltage range as the diagnostic driving pulse and has a frequency different from a probe frequency band for acquiring the ultrasound image, in order to perform the polarization processing of the plurality of ultrasound transducers in the case of performing the polarization processing.

IPC 8 full level

**B06B 1/02** (2006.01); **A61B 8/00** (2006.01); **B06B 1/06** (2006.01)

CPC (source: EP US)

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**A61B 8/463** (2013.01 - EP); **A61B 8/5261** (2013.01 - EP); **A61B 8/546** (2013.01 - US); **B06B 1/0215** (2013.01 - US); **B06B 1/0223** (2013.01 - EP);  
**B06B 1/0607** (2013.01 - US); **B06B 1/0625** (2013.01 - EP); **B06B 2201/55** (2013.01 - EP); **B06B 2201/76** (2013.01 - EP US)

Citation (search report)

- [I] US 2014066779 A1 20140306 - NAKANISHI DAISUKE [JP]
- [A] US 2012323514 A1 20121220 - NAKAZAWA YUSUKE [JP], et al
- [A] EP 1897498 A1 20080312 - OLYMPUS MEDICAL SYSTEMS CORP [JP]
- [AD] JP 2013005137 A 20130107 - SEIKO EPSON CORP

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

**EP 3586980 A1 20200101; EP 3586980 B1 20240207;** EP 4295962 A2 20231227; EP 4295962 A3 20240228; JP 2020000625 A 20200109;  
JP 2022172338 A 20221115; JP 2023171541 A 20231201; JP 7141868 B2 20220926; JP 7367152 B2 20231023; US 11471132 B2 20221018;  
US 11998396 B2 20240604; US 2020000438 A1 20200102; US 2023000471 A1 20230105

DOCDB simple family (application)

**EP 19174178 A 20190513;** EP 23208517 A 20190513; JP 2018124377 A 20180629; JP 2022142863 A 20220908; JP 2023175659 A 20231011;  
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